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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,607	11/29/2005	Thomas Grafenauer	P28533	4105
7055	7590	05/26/2009		
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				EXAMINER
				PLUMMER, ELIZABETH A
ART UNIT		PAPER NUMBER		
		3635		
NOTIFICATION DATE		DELIVERY MODE		
05/26/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,607	<b>Applicant(s)</b> GRAFENAUER ET AL.
	<b>Examiner</b> ELIZABETH A. PLUMMER	<b>Art Unit</b> 3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 February 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2 and 4-29 is/are pending in the application.  
 4a) Of the above claim(s) 25-27 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2,4-24 and 28-29 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/17/2009 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Meyerson (US Patent 5,086,599). Regarding claim 1, Meyerson discloses a device for connecting and locking building boards comprising a top side and a bottom side, having a core made of wood material and provided with a groove on at least two opposite sides, comprising an insert (40) intended for locking purposes, which insert can be inserted into the groove (Fig. 15,16) of one of the side edges, the boards being connected by substantially horizontal displacement toward the other, wherein the insert is provided with one resilient lip extending upward from a first side edge directed toward the top

side (see bottom of 40) and another resilient lip extending downward from a second side edge directed toward the bottom side of the insert (see top of 40). Also, the at least one of the resilient lip and the another resilient lip can compress towards a center of the insert (by pushing it towards the middle member 41) and then spring back out from the center of the insert when the boards are connected by the substantially horizontal displacement, and then spring back out from the center of the insert when the boards are connected by the substantially horizontal displacement.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4-5, 7-12, 14-20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (WO 00/20705) in view of Haid (US Patent 4,599,841).

a. Regarding claim 1, Martensson discloses a device for connecting and locking building boards (1) comprising a top side and a bottom side having core made of wood (page 1, line 6) material and provided with a groove (4) on at least two opposite side edges comprising an insert (10) intended for locking purposes, wherein the insert can be inserted into the groove (4) of one of the side edges, the boards being connected by substantially horizontal displacement one toward the other, wherein the insert is provide with two resilient lips (Fig. 7b, 7c, 7d)

directed toward the top side or the bottom side. While Martensson discloses lips that can extend upward from a first side edge toward the top side of the insert (Fig. 7a,7b,7c) and the lips can compress toward a center of the insert then spring back out from the center of the insert when the boards are connected by the substantial horizontal displacement (Fig. 7b,7c) and lips that can extend downward and be directed toward the bottom side of the insert (Fig. 7d) and the lips can compress toward a center of the insert then spring back out from the center of the insert when the boards are connected by the substantial horizontal displacement, Martensson disclose not disclose one embodiment wherein one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert. However, it is notoriously well known in the art that inserts can have two resilient lips wherein one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert. For example, Haid teaches a device for connecting and locking building boards comprising a top side and a bottom side, having a core made of wood material and provided with a groove on at least two opposite side edges, comprising an insert (5) intended for locking purposes, which can be inserted into the groove of one of the sides edges (Fig. 1,6), the boards being connected by substantially horizontal displacement toward one the other, wherein the insert is provided with one resilient lip extending upset from a

first side directed toward the top side of the insert (top 8) and another resilient lip extending downward from a second side edge directed toward the bottom side of the insert (bottom 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martensson to include one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert, such as taught by Haid, in order to make the insert more fully engage the grooves of the boards, creating a stronger connection.

- b. Regarding claim 2, the one and another resilient lips directed in the opposite direction (Fig. 7b,7c,7d).
- c. Regarding claim 4, the resilient lip has a tip running obliquely to the top side and bottom sides, which tip, cooperates with an obliquely running edge (Fig. 7b,7c).
- d. Regarding claim 5, the insert is plastic (page 8).
- e. Regarding claim 7, the insert has a midway between the one and another resilient lips which rests on a shoulder, running parallel to the bottom side of the bottom lip of the groove (Fig. 7c).
- f. Regarding claim 8, when the building boards are mutually connected, the insert is essentially fully surrounded in its peripheral contour by the core material of the boards (Figs. 7a,7b,7c,7d).

- g. Regarding claim 9, the angle of inclination between the obliquely running edge measures between 90 and 135 degrees (Fig. 7b,7c).
- h. Regarding claims 10-12, Martensson in view of Haid discloses the invention as claimed except for specifying the thickness of the insert, the depth of penetration of the groove, or the flexural modulus of the plastic. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a structure within the claimed range, as it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.
- i. Regarding claim 14, the side edges of the insert taper outward (Fig. 7c).
- j. Regarding claims 15 and 16, Martensson in view of Haid discloses the invention as claimed except for the side edges of the insert being rounded or conical. However, it would have been a matter of obvious design choice to form the side edges as rounded or running conically, as such a modification would have involved a mere change in shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 149 USPQ 47 (CCPA 1966).
- k. Regarding claim 17, claim 17 is a product by process claim. The patentability of a product does not depend on its method of production. The insert is inserted into a groove (abstract), and the final product does not vary regardless of whether or not the insert is inserted at a factory site.

- I. Regarding claims 18 and 19, the insert can be permanently connected by glue (page 7).
  - m. Regarding claim 20, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In this case, the board (1) has grooves (4).
  - n. Regarding claim 24, when the building boards are mutually connected, the insert is essentially fully surrounded in its peripheral contour by the core material of the boards (Figs. 7a,7b,7c,7d), and an upper surface of the insert abuts a lip of one of the building boards, the lip defining a groove that receives a tongue of another one of the building boards (Fig. 2a).
  - o. Regarding claim 28, the one resilient lip extending upward from the first side edge is the only lip that extends upward from the first side edge (Fig. 7b,7c), and the another resilient lip extending downward from the second side edge is the only lip that extends downward from the second side edge (Fig. 7d).
6. Claims 1, 13 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (US Patent 6,763,643) in view of Haid (US Patent 4,599,841).
  - a. Regarding claim 1, Martensson discloses a device for connecting and locking building boards (1) comprising a top side and a bottom side having core made of wood material and provided with a groove (4) on at least two opposite side edges comprising an insert (10) intended for locking purposes, wherein the

insert can be inserted into the groove (4) of one of the side edges, the boards being connected by substantially horizontal displacement one toward the other, wherein the insert is provided with at least one resilient lip (Fig. 7b, 7c, 7d) directed toward the top side or the bottom side. While Martensson discloses lips that can extend upward from a first side edge toward the top side of the insert (Fig. 7a, 7b, 7c) and the lips can compress toward a center of the insert then spring back out from the center of the insert when the boards are connected by the substantial horizontal displacement (Fig. 7b, 7c) and lips that can extend downward and be directed toward the bottom side of the insert (Fig. 7d) and the lips can compress toward a center of the insert then spring back out from the center of the insert when the boards are connected by the substantial horizontal displacement, Martensson does not disclose one embodiment wherein one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert. However, it is notoriously well known in the art that inserts can have two resilient lips wherein one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert. For example, Haid teaches a device for connecting and locking building boards comprising a top side and a bottom side, having a core made of wood material and provided with a groove on at least two opposite side edges, comprising an insert (5) intended for locking purposes,

which can be inserted into the groove of one of the sides edges (Fig. 1,6), the boards being connected by substantially horizontal displacement toward one the other, wherein the insert is provided with one resilient lip extending upset from a first side directed toward the top side of the insert (top 8) and another resilient lip extending downward from a second side edge directed toward the bottom side of the insert (bottom 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martensson to include one resilient lip extends upward from a first side edge directed toward the top side of the insert and another resilient lip extends downward from a second side edge directed toward the bottom side of the insert, such as taught by Haid, in order to make the insert more fully engage the grooves of the boards, creating a stronger connection.

b. Regarding claim 13, the board is provided on one side with a tongue (22) pointing substantially in the transverse direction and on the other side edge with a groove (21) corresponding thereto (Fig. 8).

c. Regarding claim 28, the one resilient lip extending upward from the first side edge is the only lip that extends upward from the first side edge (Fig. 7b,7c), and the another resilient lip extending downward from the second side edge is the only lip that extends downward from the second side edge (Fig. 7d).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (WO 00/20705) in view of Haid (US Patent 4,599,841), as applied to claim 1 above, and in further in view of Riedi (US Patent 2,863,185). Regarding claim 6,

Martensson in view of Haid discloses the invention as claimed except for the insert having at least one cavity. However, it is notoriously well known in the art that inserts can comprise a cavity. For example, Riedi teaches an insert (10) for connecting and locking boards (16), wherein the insert comprises at least one cavity (Fig. 1,2,3,4) in order to more easily deform to fit inside the grooves of the board. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Martensson in view of Haid to include at least one cavity, such as taught by Riedi, in order to make the device easier to install.

8. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyerson (US Patent 5,086,599).

a. Regarding claim 21, the one resilient lip extends from the first side edge toward a center of the insert, and the another resilient lip extends from the second side edge toward the center of the insert. Meyerson does not disclose that the length of the one lip is greater than half the distance between the first side edge and the center of the insert and that the length of the another lip is greater than half the distance between the second side edge and the center of the insert. However, it would have been a matter of obvious design choice to make the lips a longer length such that the length is greater than half the distance between the side edges and the center of the insert, as such a modification would have involved a mere change in size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

b. Regarding claim 22, each of the one and another resilient lips includes a fixed end attached to a body of the insert (Fig. 15,16), a free end opposite the fixed end (Fig. 15,16) and an oblique tip at the free end, which, for locking, instructed and arranged to cooperate with an obliquely running edge of the building board (Fig. 16).

c. Regarding claim 23, the insert comprises an upper surface step—shaped profile that allows the first resilient lip to be compressed and a lower surface step-shaped profile that allows the second resilient lip to be compressed (Fig. 15,16).

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martensson (US Patent 6,763,643) in view of Riedi (US Patent 2,863,185). Regarding claim 29, Martensson discloses each resilient lip having a tip running obliquely to the top and side and bottom side (Fig. 7b,7c), the tip, for locking, cooperates with an obliquely running edge (along the tip), when the boards are mutually connected, the insert is essentially fully surrounded in its peripheral contour by the core made of wood material of the boards (Fig. 7b,7c) and the board is provided on one side edge with a tongue pointing substantially in the transverse direction and on the other side edge with a groove corresponding thereto. Martensson does not the insert having at least one cavity. However, it is notoriously well known in the art that inserts can comprise a cavity. For example, Riedi teaches an insert (10) for connecting and locking boards (16), wherein the insert comprises at least one cavity (Fig. 1,2,3,4) in order to more easily deform to fit inside the grooves of the board. It would have been obvious to one

of ordinary skill in the art at the time the invention was made to modify Martensson to include at least one cavity, such as taught by Riedi, in order to make the device easier to install.

***Response to Arguments***

10. Applicant's arguments filed 02/17/2009 have been fully considered but they are not persuasive. Regarding applicant's arguments that claims 25-27 should not have been withdrawn, if these claims had been originally presented in the application, an election/restriction would have been filed. The features cited are not merely different, but they are also non-obvious variants, as they all describe lips of different shapes. Because applicant appears to explain the different shape and positions of the lips to be important, it is assumed that the choice in shape of the insert is not merely a design choice. This makes the restriction proper, as searching multiple different shapes would create a serious burden. Regarding applicant's argument that Meyerson does not disclose at least one of the lips compressing towards a center and then springing back, the connector of Meyerson is inherently capable of doing this action. The same is true of Martensson, which when being installed this process would actually also need to occur (Fig. 7b,7c). While the specification does not say it occurs, there is no way the connector could be inserted without it inherently happening.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH A. PLUMMER whose telephone number is

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(571)272-2246. The examiner can normally be reached on Monday through Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/  
Primary Examiner, Art Unit 3633

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